

What is claimed is:

1. A method of adjusting a rotary machine including a housing, a rotary body, movement restricting means and an adjustable member, the rotary body being  
5 rotatably supported in the housing and having a rotary axis for rotation, the movement restricting means restricting movable amount of the rotary body in a direction of the rotary axis to a predetermined amount when the movement restricting means contacts with the rotary body, the movement restricting means also restricting one-side sliding movement of the rotary body in the direction of  
10 the rotary axis when a movement restricting part and a contacting part contact with each other, one of the movement restricting part and the contacting part being provided by the adjustable member that is fixedly press-fitted in one of the housing and the rotary body in the direction of the rotary axis, comprising the steps of:

15 press-fitting the adjustable member to one of the housing and the rotary body where the adjustable member is arranged, to a reference position at which movable amount of the rotary body is zero; and

adjusting the movable amount of the rotary body in the direction of the rotary axis to the predetermined amount by varying a position of the adjustable  
20 member that is press-fitted to the one of the housing and the rotary body from the reference position by the predetermined amount in a direction in which the movement restricting part and the contacting part contacting with each other are

separated from each other.

2. The method according to claim 1, wherein the adjustable member is the movement restricting part that is fixedly press-fitted to the housing, the contacting  
5 part being formed on the rotary body.

3. The method according to claim 1, wherein the adjustable member is the contacting part that is fixedly press-fitted to the rotary body, the movement restricting part being formed on the housing.

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4. The method according to claim 1, wherein the adjusting step comprises:  
adjusting the movable amount of the rotary body to the predetermined amount by pressing the rotary body against the movement restricting part by the predetermined amount.

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5. The method according to claim 4, wherein a part of the rotary body is exposed outside from the housing in such a manner that the rotary machine receives power from an external drive source, the adjusting step comprising:

adjusting the movable amount of the rotary body to the predetermined  
20 amount by pressing an exposed portion of the rotary body.

6. The method according to claim 1, wherein the housing includes at least a

first housing component and a second housing component which are fixedly joined to each other, the rotary body being rotatably supported in the first housing component, the second housing component being adjoined to the first housing component, the press-fitting step comprising:

5           press-fitting the adjustable member to one of the second housing component and the rotary body at the reference position by pressing the adjustable member against the other of the second housing component and the rotary body when the first housing component and the second housing component are fixedly joined to each other.

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7.       The method according to claim 1, wherein the housing includes at least a first housing component and a second housing component which are fixedly joined to each other, the rotary body being rotatably supported in the first housing component, the second housing component being adjoined to the first housing component, the press-fitting step comprising:

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          press-fitting the adjustable member to the first housing component at the reference position by pressing the adjustable member against the rotary body before the first housing component and the second housing component are fixedly joined to each other.

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8.       The method according to claim 1, wherein the housing defining a cylinder bore and a suction pressure region, the piston being accommodated in the

cylinder bore and being reciprocated therein in accordance with the rotation of the rotary shaft that serves as the rotary body, thereby a compression mechanism being accommodated in the housing for compressing refrigerant gas, the rotary shaft having an end to which a rotary valve is press-fitted, the rotary valve opening and closing a passage formed between the cylinder bore and the suction pressure region in accordance with synchronous rotation of the rotary shaft, the contacting part being formed on the rotary valve.

9. A piston type compressor comprising:

10 a housing defining a cylinder bore, a suction pressure region and a valve accommodation chamber that has an inner circumferential surface;

a piston accommodated in the cylinder bore;

a rotary shaft rotatably supported in the housing, the rotary shaft being connected to the piston in such a manner that the rotation of the rotary shaft is converted into reciprocation of the piston, the rotary shaft having a rotary axis for rotation and an end;

a passage formed between the cylinder bore and the suction pressure region;

a rotary valve rotatably accommodated in the valve accommodation chamber, the rotary valve being fixedly press-fitted to the end of the rotary shaft to form a rotary body, the rotary valve opening and closing the passage in accordance with synchronous rotation of the rotary shaft, the rotary valve having

an outer circumferential surface, the outer circumferential surface of the rotary valve and the inner circumferential surface of the valve accommodation chamber constituting a slide-bearing surface, the end of the rotary shaft being rotatably supported in the housing through the rotary valve;

5           a compression mechanism accommodated in the housing for compressing refrigerant gas based on the reciprocation of the piston; and

          movement restricting means for restricting movable amount of the rotary body to a predetermined amount in a direction of the rotary axis when the movement restricting means contacts with the rotary body, one-side sliding movement of the rotary body in the direction of the rotary axis being restricted  
10           when a movement restricting part and a contacting part contact with each other, one of the movement restricting part and the contacting part being provided by an adjustable member that is fixedly press-fitted to one of the housing and the rotary body in the direction of the rotary axis.

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10.       The piston type compressor according to claim 9, wherein the adjustable member is the movement restricting part that is fixedly press-fitted to the housing, the contacting part being formed on the rotary body.

20       11.       The piston type compressor according to claim 9, wherein the adjustable member is the contacting part that is fixedly press-fitted to the rotary body, the movement restricting part being formed on the housing.